

Fruit Acreage Increases

The January 1, 2001 Fruit Acreage Survey in Washington shows the industry is larger than eight years earlier. The total of the fruit included in the survey was 256,100 acres, 14 percent more than the January 1, 1993 total acreage of 223,700 acres.

Apples have the largest acreage at 192,000, 12 percent more than the 172,000 acres on January 1, 1993. Sweet cherries had the sharpest increase, 76 percent with 29,000 acres for January 1, 2001 compared with 16,500 acres in 1993.

The inventory of trees indicates a change in density for most fruit at the area and state level. Apples went from 262 trees per acre in 1993 to 391 trees per acre in 2001. The total inventory of apple trees went from 45.0 million trees in Washington to 75.1 million trees. The Wenatchee area shows the sharpest increase in

trees per acre going from 223 in 1993 to 367 in 2001, due to the removal of the older plantings. Yakima Valley area went from 233 trees per acre in 1993 to 370 in 2001, an increase of 59 percent. The Columbia Basin averaged 462 trees per acre in 2001 compared with 365 in 1993. The increase in the Yakima Valley and Columbia Basin reflect higher density plantings in recent years more than the removal of older blocks.

The increase for total fruit is similar for all regions, but the change of individual fruits show different trends. The Wenatchee area had a drop in apple acreage and an increase in both sweet cherries and pears. Both apples and sweet cherries increased and pears decreased in the Yakima Valley and Columbia Basin. All other areas of the state had a similar pattern as the Yakima Valley and Columbia Basin, but on a smaller scale.

Total Fruit Acreage, by District, Washington, January 1, 2001

Area	Apples	Apricots	Sweet Cherries	Nectarines	Peaches	Pears		Prunes/ Plums	Total Tree Fruit	
						Bartlett	Winter			
	Acres									
	Wenatchee	54,000	450	9,500	250	350	3,650	11,000	100	79,350
	Yakima Valley	90,500	600	12,000	1,000	2,000	7,900	3,000	900	118,100
	Columbia Basin	37,500	200	4,500	250	550	450	500	50	43,850
	All Other Areas	10,000	50	3,000	0	300	600	900	50	14,800
	State Total	192,000	1,300	29,000	1,500	3,200	12,600	15,400	1,100	256,100
	1,000 Trees									
	Wenatchee	19,811	101	1,940	107	91	717	2,104	37	24,977
	Yakima Valley	33,452	113	1,740	237	484	1,751	624	203	38,702
	Columbia Basin	17,307	39	610	95	227	130	222	4	18,373
	All Other Areas	4,530	7	495	0	48	103	138	10	5,426
	State Total	75,100	260	4,785	439	850	2,701	3,088	254	87,478
	Trees Per Acre									
	Wenatchee	367	224	204	428	260	196	191	370	315
	Yakima Valley	370	188	145	237	242	222	208	226	328
	Columbia Basin	462	195	136	380	413	289	444	80	419
	All Other Areas	453	140	165	-	160	172	153	200	367
	State Total	391	200	165	293	266	214	201	231	342

Bartlett and winter pear estimates were not available by area for January 1, 1993. However, the dominant type of pear in Wenatchee is the winter pear, and the Bartlett pear is the major variety of the Yakima Valley for 2001.

The inventory of other fruit trees increased for all fruit except apricots and prunes and plums. The inventory of apricot trees was the same for both 1993 and 2001 at 260,000 trees. The combination of more trees and more acres for sweet cherries resulted in the 2001 trees per acre at 165 compared with the 1993 density of 129 trees per acre. Peaches showed an increase of

200 acres at the state level along with an increased tree inventory of 850,000 compared with the 1993 inventory of 660,000 trees. Prunes and plum acreage decreased 600 acres, going from 1,700 to 1,100 acres with the tree inventory decreasing at the same rate.

The Fruit Acreage Survey was conducted as a mail, phone, and personal interview survey that included all tree fruit except tart cherries and did not include grapes. Funding for data collection was supported by industry and grower organizations. The full report is on the web at: www.nass.usda.gov/wa.

Total Fruit Acreage, by District, Washington, January 1, 1993

Area	Apples	Apricots	Sweet Cherries	Nectarines	Peaches	Pears	Prunes/Plums	Total Tree Fruit
Acres								
Wenatchee	56,000	400	4,800	250	300	12,450	50	74,250
Yakima Valley	78,000	600	8,700	850	1,900	12,000	1,400	103,450
Columbia Basin	31,000	350	2,300	350	400	1,300	200	35,900
All Other Areas	7,000	50	700	50	400	1,850	50	10,100
State Total	172,000	1,400	16,500	1,500	3,000	27,600	1,700	223,700
1,000 Trees								
Wenatchee	12,500	75	675	65	60	2,235	20	15,630
Yakima Valley	18,200	115	1,040	205	440	2,455	285	22,740
Columbia Basin	11,300	60	305	95	115	305	80	12,260
All Other Areas	3,000	10	105	10	45	415	10	3,595
State Total	45,000	260	2,125	375	660	5,410	395	54,225
Trees Per Acre								
Wenatchee	223	188	141	260	200	180	400	211
Yakima Valley	233	192	120	241	232	205	204	220
Columbia Basin	365	171	133	271	288	235	400	342
All Other Areas	429	200	150	200	113	224	200	356
State Total	262	186	129	250	220	196	232	242

Washington Bearing Fruit Acreage, January 1, 2001

The acreage of the fruit that was bearing age on January 1, 2001 totaled 220,850 acres compared with 191,600 acres for the comparable fruit in 1993. This represents an increase of 15 percent for the total fruit acreage, but individual fruits show both increases and decreases.

Apple bearing acreage at 168,000 acres is 14 percent more than the 1993 bearing acreage of 147,000 acres. Sweet cherry bearing acres shows the sharpest increase with 55 percent more acreage in 2001 at 22,000 acres compared with 14,200 acres in 1993. Peaches and pear acreage was slightly higher in 2001 than 1993 and apricot and prunes and plum acreage was down. Apricot bearing acres were 1,250 in 2001, a decrease of 50 acres from 1993. Prunes and plum acreage was 1,000 for 2001 compared with 1,500 bearing acres in 1993.

Bearing age of fruit varies with the fruit, variety, rootstock, the climate of the block and the cultural practices of the orchardist. The bearing age was calculated in 1993 based on a combination of these factors. However, the questionnaire was designed for the 2001 survey to have the respondent report the acreage of each variety by block and report the number of bearing and nonbearing trees for the block. This design allowed the orchardists to have more input in reporting the bearing age than the formula procedure.

The percent of total acres that is bearing age for apples is 87.5 percent at the state level. Wenatchee and the All Other Areas has the highest percentage of bearing acres at 90 percent, followed by the Yakima Valley at 88 percent bearing and the Columbia Basin at 83 percent bearing age.

Fruit Acreage, Bearing Age, by District, Washington, January 1, 2001

Area	Apples	Apricots	Sweet Cherries	Nectarines	Peaches	Pears		Prunes/ Plums	Total Tree Fruit
						Bartlett	Winter		
	Acres								
Wenatchee	48,500	450	6,500	150	300	3,200	9,500	50	68,600
Yakima Valley	79,500	550	9,500	850	1,650	7,200	2,900	850	102,950
Columbia Basin	31,000	200	3,500	200	450	400	400	50	36,200
All Other Areas	9,000	50	2,500	0	300	500	700	50	13,100
State Total	168,000	1,250	22,000	1,200	2,700	11,300	13,500	1,000	220,850
	1,000 Trees								
Wenatchee	17,160	101	1,295	70	70	620	1,766	18	21,100
Yakima Valley	27,580	104	1,345	191	394	1,550	598	191	31,944
Columbia Basin	13,365	39	470	72	188	115	180	4	14,432
All Other Areas	3,995	7	410	0	46	85	105	10	4,658
State Total	62,100	251	3,520	333	698	2,370	2,649	223	72,134
	Trees Per Acre								
Wenatchee	354	224	199	467	233	194	186	360	308
Yakima Valley	347	189	142	225	239	215	206	225	310
Columbia Basin	431	195	134	360	418	288	450	80	399
All Other Areas	444	140	164	-	153	170	150	200	356
State Total	370	201	160	278	259	210	196	223	327

This further illustrates the pattern that the Columbia Basin and Yakima Valley have more recent plantings. Apples can reach bearing age in some orchards in two years for some varieties and practices, while other varieties may require up to 5 years before considered bearing age. The percent of total acres bearing for apples in 1993 was 85.5 percent at the state level. The All Other Area and the Columbia Basin had the lowest percentage bearing age at 74 and 78 percent respectively. The Wenatchee area had 87 percent bearing acres and Yakima Valley had 88 percent bearing acres.

The sweet cherry situation reflects the recent plantings and expansion of the industry. The percentage of total acres

that are bearing age at the state level is 75.9 percent. The percent of acreage that is bearing age is the lowest in the Wenatchee area at 68 percent and the highest in the All Other Area at 83 percent bearing age. Cherries normally reach bearing age in 4 to 5 years. In 1993, the percent bearing age at the state level was 86.1 percent. Yakima Valley percent bearing age was 91 percent followed by the Wenatchee area at 80 percent bearing age and Columbia Basin at 76 percent.

Pears normally take 6 years to reach bearing age. Bartlett pears were 90 percent bearing age and winter pears were 88 percent bearing age. Estimates were not made for Bartlett and winter pears at the area level for 1993.

Fruit Acreage, Bearing Age, by District, Washington, January 1, 1993

Area	Apples	Apricots	Sweet Cherries	Nectarines	Peaches	Pears	Prunes/Plums	Total Tree Fruit
Acres								
Wenatchee	48,900	360	3,850	220	250	10,100	40	63,720
Yakima Valley	68,600	570	7,900	660	1,600	11,200	1,260	91,790
Columbia Basin	24,300	320	1,750	280	300	1,100	150	28,200
All Other Areas	5,200	50	700	40	350	1,500	50	7,890
State Total	147,000	1,300	14,200	1,200	2,500	23,900	1,500	191,600
1,000 Trees								
Wenatchee	9,700	65	505	60	55	1,725	15	12,125
Yakima Valley	14,250	110	870	155	355	2,185	260	18,185
Columbia Basin	8,150	60	225	70	70	250	60	8,885
All Other Areas	1,900	10	105	5	40	335	10	2,405
State Total	34,000	245	1,705	290	520	4,495	345	41,600
Trees Per Acre								
Wenatchee	198	181	131	273	220	171	375	190
Yakima Valley	208	193	110	235	222	195	206	198
Columbia Basin	335	188	129	250	233	227	400	315
All Other Areas	365	200	150	125	114	223	200	305
State Total	231	188	120	242	208	188	230	217

Apples

The apple industry is in transition. Total acreage in 1993 was 172,000, and the 2001 acreage is 192,000. However, the 1997 Census of Agriculture shows 204,674 acres of all apples. There was a shift from Red Delicious apples to newer varieties in all areas.

The Wenatchee area had the sharpest shift, with 22,400 acres of Red Delicious, a decrease of 40 percent from 1993. Yakima Valley had 40,100 acres, a decrease of 22 percent from 1993, and the Columbia Basin had 16,300 acres of Red Delicious, a decrease of 14 percent. All other areas showed an increase of 60 percent for Red Delicious with 3,200 acres.

The shift to newer varieties has resulted in sharp increases in the other variety acreage. Yakima Valley had the largest shift, nearly doubling the 1993 level to 50,400 acres for an increase of 90 percent. The Wenatchee area other apple varieties increased 71 percent and the Columbia Basin increased 77 percent. The State total was 110,000 acres, an increase of 48,000 acres or 77 percent, from 1993.

The net change of apple acreage from 1993 was positive for all areas except Wenatchee, which was down 4 percent. Yakima, Columbia Basin, and other areas show increases of 16 percent, 21 percent, and 43 percent respectively.



Total Apple Acreage and Trees, by District, Washington, January 1, 2001

Area	Acreage			Trees		
	Red Delicious	Other	Total	Red Delicious	Other	Total
	Acres			1,000 Trees		
Wenatchee	22,400	31,600	54,000	5,284	14,527	19,811
Yakima Valley	40,100	50,400	90,500	10,700	22,752	33,452
Columbia Basin	16,300	21,200	37,500	5,828	11,479	17,307
All Other Areas	3,200	6,800	10,000	1,088	3,442	4,530
State Total	82,000	110,000	192,000	22,900	52,200	75,100

Total Apple Acreage and Trees, by District, Washington, January 1, 1993

Area	Acreage			Trees		
	Red Delicious	Other	Total	Red Delicious	Other	Total
	Acres			1,000 Trees		
Wenatchee	37,500	18,500	56,000	7,075	5,425	12,500
Yakima Valley	51,500	26,500	78,000	10,395	7,805	18,200
Columbia Basin	19,000	12,000	31,000	4,955	6,345	11,300
All Other Areas	2,000	5,000	7,000	695	2,305	3,000
State Total	110,000	62,000	172,000	23,120	21,880	45,000

Bearing age apple acreage follows the same pattern as the total acreage and was 168,000 acres on January 1, 2001 compared with 147,000 acres on January 1, 1993, an increase of 14 percent. The Red Delicious bearing acres was down 28 percent to 74,000 acres from 102,500 acres in 1993 and other varieties more than doubled, from 44,500 acres in 1993 to 94,000 acres in 2001, an increase of 111 percent.

Wenatchee was the only area to register a decline in bearing acreage, going from 48,900 acres in 1993 to 48,500 acres in 2001. The Red Delicious variety acreage in the Wenatchee area declined more sharply than other areas, going from 35,500 acres in 1993 to 20,500 acres in 2001, a decrease of 42 percent. Other apple variety acreage increased 109 percent in the Wenatchee area, going from 13,400 acres to 28,000 acres in 2001.

Yakima Valley remained the major growing area with 79,500 acres of bearing apples, an increase of 16 percent from 1993. Nearly half of the state's bearing apple acreage, 47 percent, was in the Yakima Valley. Red

Delicious acreage declined 24 percent while other variety bearing acreage increased 111 percent.

The Columbia Basin bearing acreage increased 28 percent, going from 24,300 acres to 31,000 acres in 2001. Red Delicious acreage followed the pattern of the other areas and declined 21 percent with the other variety bearing acreage increased 140 percent, the sharpest increase of any area.

The Other Areas bearing acres increased for Red Delicious apples and other varieties. Red Delicious acreage doubled the 1993 level and the other varieties increased 62 percent. The total bearing acreage of apples in the other area totaled 9,000 acres or 5 percent of the state's bearing acreage.

Bearing age trees reflect the higher density plantings of apples. Total bearing trees was 62.1 million for 2001, compared with 34.0 million in 1993. The increase in bearing trees is 83 percent, while the increase in bearing acres is 14 percent.

Apple Acreage and Trees, Bearing Age, by District, Washington, January 1, 2001

Area	Acreage			Trees		
	Red Delicious	Other	Total	Red Delicious	Other	Total
	Acres			1,000 Trees		
Wenatchee	20,500	28,000	48,500	4,615	12,545	17,160
Yakima Valley	37,000	42,500	79,500	9,529	18,051	27,580
Columbia Basin	13,500	17,500	31,000	4,335	9,030	13,365
All Other Areas	3,000	6,000	9,000	971	3,024	3,995
State Total	74,000	94,000	168,000	19,450	42,650	62,100

Apple Acreage and Trees, Bearing Age, by District, Washington, January 1, 1993

Area	Acreage			Trees		
	Red Delicious	Other	Total	Red Delicious	Other	Total
	Acres			1,000 Trees		
Wenatchee	35,500	13,400	48,900	6,500	3,200	9,700
Yakima Valley	48,500	20,100	68,600	9,565	4,685	14,250
Columbia Basin	17,000	7,300	24,300	4,365	3,785	8,150
All Other Areas	1,500	3,700	5,200	550	1,350	1,900
State Total	102,500	44,500	147,000	20,980	13,020	34,000